

Notice of Allowability

Application No.

10/665,328

Examiner

Truc T. T. Nguyen

Applicant(s)

NISHIDE, SATORU

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to election made on 6/30/04 and an interview on 9/14/04.
2. ☒ The allowed claim(s) is/are 11-14, 16, 19 and 20.
3. ☒ The drawings filed on 18 September 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 9/18/03 ; 2/2/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 9/14/04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other examiner's note (4 pages).

TRUC T. NGUYEN
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gerald E. Hespos on September 14, 2004.

The application has been amended as follows:

CLAIM AMENDMENTS:

See attached Examiner's note (pages 1-4).

2. The following is an examiner's statement of reasons for allowance:

Claims 11-14, 16, and 19-20 are allowed.

Regarding claims 11-14, the prior art of record fails to teach a connector assembling construction having a restricting means comprising contacts on the floating mechanism and on the connector that is supported on the floating mechanism.

Regarding claims 16 and 19-20, the prior art of record fails to teach the movable connector having a second supporting member extending in a direction intersecting the connecting direction and substantially normal to a sliding direction, and a guidable portion slidable along the guide rails and holding the guide rail from front and back sides with respecting to the connecting direction.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T. T. Nguyen whose telephone number is 571-272-2011. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 571-272-2800 extension 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Truc T. T. Nguyen
Primary Examiner
Art Unit 2833



TRUC T. NGUYEN
PRIMARY EXAMINER

CLAIM AMENDMENTS:

1. (canceled).
2. (canceled).
3. (canceled).
4. (canceled).
5. (canceled).
6. (canceled).
7. (canceled).
8. (canceled).
9. (canceled).
10. (canceled).

11. (currently amended) A connector assembling construction for connecting a first connector ~~(10; 220; 330)~~ on a module (M) and a second connector ~~(130; 250; 320)~~ on a body (B) along a connecting direction (CD) as the module (M) is assembled with the body (B) in an automotive vehicle, ~~wherein~~ comprising:

a floating mechanism ~~(230; 362; 344)~~ to support at least one of the first and second connectors ~~(10; 130; 220; 250; 330; 320)~~ for displacement in a floating direction (FD) intersecting the connector connecting direction ~~(CD)~~; and

the floating mechanism ~~(230; 362; 344)~~ comprising restricting means ~~(240; 345)~~ for restricting a displacement of the connector ~~(10; 220; 330)~~ with that is supported on the floating mechanism when the connectors (10; 130; 220; 250; 330; 320) are unconnected and canceling the restriction on displacement of the connector that is supported on the floating mechanism (10; 220; 330) after connection of the first and second connectors (10; 130; 220; 250; 330; 320) is started, the restricting means

comprising contacts on the floating mechanism and on the connector that is supported on the floating mechanism for contacting one another when the first and second connectors are unconnected and thereby restricting movement of the connector that is supported on the floating connector in the floating direction and relative to the floating mechanism, the contacts on the floating mechanism and on the connector that is supported on the floating mechanism being disengaged as the connection of the connectors progresses so that the connector that is supported on the floating mechanism can displace in the floating direction relative to the floating mechanism.

12. (currently amended) The connector assembling construction of claim 11, wherein the first connector (10; 220; 330) has a receptacle (12; 223; 332) into which the second connector (130; 250; 320) is fittable, a guiding portion (18; 225; 336) for correcting displacement between the connectors (10; 130; 220; 250; 330; 320) being formed at an opening edge portion of the receptacle (12; 223; 332).

13. (currently amended) The connector assembling construction of claims 12, wherein the floating mechanism (230; 362; 344) comprises a guide rail (232; 362) on at least one of the module (M) and the body (B) and extending along the floating direction (FD) intersecting the connecting direction (CD) of the connectors (10; 130; 220; 250; 330; 320), and a floating member (17; 234; 360) movable substantially along the guide rail (232; 362) while supporting the connector (10; 220; 330).

14. (currently amended) The connector assembling construction of claim 13, wherein the restricting means (240; 345) comprises a displacing means (117a; 242-244; 253; 338-341) for relatively displacing the connector (10; 220; 330) substantially in the connecting direction (CD) with respect to the floating member (17; 234; 360) as the connection of the first and second connectors (20; 50) progresses.

15. (canceled)

16. (currently amended) A connector connecting construction for connecting a movable connector ~~(40; 130; 220; 330)~~ with a waiting-side connector ~~(10; 250; 320)~~ to be mounted on a fixed member ~~(B)~~, wherein one of the waiting-side connector ~~(10; 250; 320)~~ and the fixed member ~~(40; 130; 220; 330)~~ comprises a first supporting member ~~(32; 232; 362)~~ guide rail extending substantially straight in a direction ~~(TD)~~ intersecting substantially normal to a connecting direction ~~(CD)~~ and slidably supporting the respective connector ~~(10; 250; 320)~~ substantially along an extending direction ~~(TD)~~ of the supporting member ~~(32; 232; 362)~~ guide rail, the movable connector being mounted on an assembling member to be assembled with the fixed member, the two connectors being connected as the assembling member is assembled with the fixed member, one of the movable connector and the assembling member comprising a second supporting member extending in a direction intersecting the connecting direction and substantially normal to a sliding direction of the waiting-side connector and slidably supporting the movable connector along an extending direction thereof, and a guidable portion slidable along the guide rail and holding the guide rail from front and back sides with respect to the connecting direction.

17. (canceled).

18. (canceled).

19. (currently amended) The connector connecting construction of claim ~~18~~ 16, wherein one of the connectors ~~(10; 250; 320)~~ includes a receptacle ~~(12; 223; 332)~~ into which the other of the connectors ~~(10; 250; 320)~~ is fittable, the receptacle ~~(12; 223; 332)~~ having a guide surface ~~(225; 336)~~ for guiding the connectors ~~(10; 12; 223; 250; 320; 332)~~ into substantial alignment, and a restricting means ~~(345; 364; 346; 365; 326; 353; 327; 354)~~ to restrict a slidable area ~~(C; D)~~ of at least one of

the connectors ~~(10; 250; 320)~~ permitted by the respective supporting member ~~(232; 362; 351)~~ within a guidable area ~~(A; B)~~ by the guide surface ~~(225; 336)~~ of the receptacle ~~(12; 223; 332)~~.

20. (currently amended) The connector connecting construction of claim ~~17~~ 16, wherein the waiting-side connector ~~(10; 250; 320)~~ is mounted on the fixed member ~~(B)~~ with a connecting surface thereof faced up, the movable connector ~~(40; 130; 220; 330)~~ is mounted on the assembling member ~~(M)~~ with a connecting surface faced down, and the movable connector ~~(40; 130; 220; 330)~~ is connected with the waiting-side connector ~~(10; 250; 320)~~ by displacing the assembling member ~~(M)~~ substantially downward with respect to the fixed member ~~(B)~~.

21. (canceled).